

ANTISENSE IMAGING OF GENE EXPRESSION OF THE BRAIN IN VIVO

ABSTRACT OF THE DISCLOSURE

This invention provides imaging reagents for the detection of a gene or
5 gene expression product (*e.g.* mRNA) in a brain cell *in vivo*. Preferred reagents comprise
a detectable label attached to a first nucleic acid that specifically hybridizes to the gene or
to a nucleic acid transcribed from the gene. The first nucleic acid is linked to a targeting
ligand that is capable of binding a receptor on a cell comprising the blood brain barrier and
crossing said blood brain barrier.

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